

IN THE CLAIMS

Please amend the claims as follows:

1-33. (Canceled)

34. (Previously Presented) A cutting tool comprising:

a tool body having a distal end; and

a plurality of tips mounted to the distal end of the tool body, each tip of the plurality of tips comprising a plate of substantially quadrilateral shape, the plate having a first corner having a corner angle of less than 90° and an adjacent second corner having a corner angle of less than 90° , wherein at least one of the first corner and the second corner is arranged to project along an outer periphery of the distal end of the tool body, wherein:

each tip of the plurality of tips has two opposing cutting edges defined as long cutting edges and another two opposing cutting edges defined as short cutting edges;

one of the long cutting edges in a first of the plurality of tips projecting towards the distal end of the tool body is defined as a first front peripheral cutting edge and one of the short cutting edges in the first of the plurality of tips is defined as a first outer peripheral cutting edge; and

one of the short cutting edges in a second of the plurality of tips projecting towards the distal end of the tool body is defined as a second front peripheral cutting edge and one of the long cutting edges in the second of the plurality of tips is defined as a second outer peripheral cutting edge.

35. (Previously Presented) The cutting tool of claim 34, wherein the first and second outer peripheral cutting edges are oriented such that rotation paths of the first and second outer peripheral cutting edges overlap when the tool body is rotated around a rotation axis.

36.-60. (Canceled)

61. (Previously Presented) A tip comprising a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein the tip is formed of a substantially quadrilateral-shaped plate, and wherein said tip includes at least one edge corner having a corner angle of greater than 90° , wherein:

said first edge corner is defined by a first cutting edge and a second cutting edge;

said first cutting edge includes a main cutting tooth portion and a sub-cutting tooth portion;

said sub-cutting tooth portion is provided adjacent a joint between said first cutting edge and said second cutting edge;

said sub-cutting tooth portion is slightly inclined with respect to main cutting tooth portion; and

wherein said corner angle of said first edge corner is defined as an angle between said main cutting tooth portion of said first cutting edge and said second cutting edge.

62.-64. (Canceled)

65. (Previously Presented) A cutting tool comprising:

a tool body having a distal end; and

a plurality of tips mounted to the distal end of the tool body, each tip of the plurality of tips comprising a plate of substantially quadrilateral shape, the plate having a first corner having a corner angle of less than 90° and an adjacent second corner having a corner angle of less than 90° , wherein at least one of the first corner and the second corner is arranged to project along an outer periphery of the distal end of the tool body, wherein:

said first corner is defined by a first cutting edge and a second cutting edge;

said first cutting edge includes a main cutting tooth portion and a sub-cutting tooth portion;

said sub-cutting tooth portion is provided adjacent a joint between said first cutting edge and said second cutting edge;

said sub-cutting tooth portion is slightly inclined with respect to main cutting tooth portion; and

wherein said corner angle of said first corner is defined as an angle between said main cutting tooth portion of said first cutting edge and said second cutting edge.

66. (Previously Presented) A cutting tool comprising:

a tool body having a distal end; and

a plurality of tips mounted to the distal end of the tool body, each tip of the plurality of tips comprising a plate of substantially quadrilateral shape, the plate having a first corner having a corner angle of less than 90° and an adjacent second corner having a corner angle of less than 90° , wherein at least one of the first corner and the second corner is arranged to project along an outer periphery of the distal end of the tool body, wherein:

said tool body has an axis of rotation;

said plurality of tips comprises a first tip, a second tip, a third tip, and a fourth tip;

said first tip and said third tip are provided within a first groove on said tool body, said first tip and said third tip being provided at different locations along the axis of rotation, said first tip and said third tip being spaced apart along the axis of rotation; and

said second tip and said fourth tip are provided within a second groove on said tool body, said second tip and said fourth tip being provided at different locations along the axis of rotation, said second tip and fourth tip being spaced apart along the axis of rotation.

67. (Previously Presented) The cutting tool of claim 66, wherein:

said first tip has a first outer peripheral cutting edge and the second tip has a second outer peripheral cutting edge, said first outer peripheral cutting edge and said second outer peripheral cutting edge are oriented such that rotation paths of said first outer peripheral cutting edge and said second outer peripheral cutting edge overlap when said tool body is rotated around the rotation axis;

said third tip has a third outer peripheral cutting edge and the fourth tip has a fourth outer peripheral cutting edge, said third outer peripheral cutting edge and said fourth outer peripheral cutting edge are oriented such that rotation paths of said third outer peripheral cutting edge and said fourth outer peripheral cutting edge overlap when said tool body is rotated around the rotation axis;

a first space provided between said first outer peripheral cutting edge and said third outer peripheral cutting edge, said first space being oriented such that a rotation path of at least one of said second outer peripheral cutting edge and said fourth outer peripheral cutting edge overlap with said first space when said tool body is rotated around the rotation axis;

a second space is provided between said second outer peripheral cutting edge and said fourth outer peripheral cutting edge, said second space being oriented such that a rotation path of at least one of said first outer peripheral cutting edge and said third outer peripheral cutting edge overlap with said second space when said tool body is rotated around the rotation axis.

68.-75. (Canceled)

76. (Previously Presented) A tip comprising a substantially planar plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner

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having a corner angle of less than 90° , wherein the plate includes at least one edge corner having a corner angle of greater than 90° , wherein:

said first edge corner is defined by a first cutting edge and a second cutting edge;

said first cutting edge includes a main cutting tooth portion and a sub-cutting tooth portion;

said sub-cutting tooth portion is provided adjacent a joint between said first cutting edge and said second cutting edge;

said sub-cutting tooth portion is slightly inclined with respect to main cutting tooth portion; and

wherein said corner angle of said first edge corner is defined as an angle between said main cutting tooth portion of said first cutting edge and said second cutting edge.

77.-82. (Canceled)

83. (Previously Presented) A cutting tool comprising:

a tool body having a distal end;

a first tip mounted to the distal end of the tool body, said first tip comprising a substantially planar plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner is arranged along an outer periphery of the distal end of the tool body;

a second tip mounted to the distal end of the tool body, said second tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first

edge corner and the second edge corner of said second tip is arranged along the outer periphery of the distal end of the tool body;

a third tip mounted to the distal end of the tool body, said third tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner of said third tip is arranged along the outer periphery of the distal end of the tool body; and

a fourth tip mounted to the distal end of the tool body, said fourth tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner of said fourth tip is arranged along the outer periphery of the distal end of the tool body, wherein:

each tip of said first tip, said second tip, said third tip, and said fourth tip have two opposing cutting edges defined as long cutting edges and another two opposing cutting edges defined as short cutting edges;

one of said long cutting edges of said first tip extends along the outer periphery;

one of said short cutting edges of said second tip extends along the outer periphery;

one of said long cutting edges of said third tip extends along the outer periphery; and

one of said long cutting edges of said fourth tip extends along the outer periphery.

84. (Previously Presented) A cutting tool comprising:

a tool body having a distal end;

a first tip mounted to the distal end of the tool body, said first tip comprising a substantially planar plate including a first edge corner having a corner angle of less than 90° ,

and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner is arranged along an outer periphery of the distal end of the tool body;

a second tip mounted to the distal end of the tool body, said second tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner of said second tip is arranged along the outer periphery of the distal end of the tool body;

a third tip mounted to the distal end of the tool body, said third tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner of said third tip is arranged along the outer periphery of the distal end of the tool body; and

a fourth tip mounted to the distal end of the tool body, said fourth tip comprising a plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner of said fourth tip is arranged along the outer periphery of the distal end of the tool body, wherein:

said tool body has an axis of rotation;

said first tip and said third tip are provided within a first groove on said tool body, said first tip and said third tip being provided at different locations along the axis of rotation, said first tip and said third tip being spaced apart along the axis of rotation; and

said second tip and said fourth tip are provided within a second groove on said tool body, said second tip and said fourth tip being provided at different locations along the axis of rotation, said second tip and fourth tip being spaced apart along the axis of rotation.

85. (Previously Presented) The cutting tool of claim 84, wherein:

said first tip has a first outer peripheral cutting edge and the second tip has a second outer peripheral cutting edge, said first outer peripheral cutting edge and said second outer peripheral cutting edge are oriented such that rotation paths of said first outer peripheral cutting edge and said second outer peripheral cutting edge overlap when said tool body is rotated around the rotation axis;

said third tip has a third outer peripheral cutting edge and the fourth tip has a fourth outer peripheral cutting edge, said third outer peripheral cutting edge and said fourth outer peripheral cutting edge are oriented such that rotation paths of said third outer peripheral cutting edge and said fourth outer peripheral cutting edge overlap when said tool body is rotated around the rotation axis;

a first space provided between said first outer peripheral cutting edge and said third outer peripheral cutting edge, said first space being oriented such that a rotation path of at least one of said second outer peripheral cutting edge and said fourth outer peripheral cutting edge overlap with said first space when said tool body is rotated around the rotation axis; and

a second space is provided between said second outer peripheral cutting edge and said fourth outer peripheral cutting edge, said second space being oriented such that a rotation path of at least one of said first outer peripheral cutting edge and said third outer peripheral cutting edge overlap with said second space when said tool body is rotated around the rotation axis.

86. (Canceled)

87. (Canceled)

88. (Previously Presented) A cutting tool comprising:

a tool body having a distal end; and

a first tip mounted to the distal end of the tool body, said first tip comprising a substantially planar plate including a first edge corner having a corner angle of less than 90° , and an adjacent second edge corner having a corner angle of less than 90° , wherein at least one of the first edge corner and the second edge corner is arranged along an outer periphery of the distal end of the tool body, and wherein the plate includes at least one edge corner having a corner angle of greater than 90° , wherein:

said first edge corner is defined by a first cutting edge and a second cutting edge;

said first cutting edge includes a main cutting tooth portion and a sub-cutting tooth portion;

said sub-cutting tooth portion is provided adjacent a joint between said first cutting edge and said second cutting edge;

said sub-cutting tooth portion is slightly inclined with respect to main cutting tooth portion; and

wherein said corner angle of said first edge corner is defined as an angle between said main cutting tooth portion of said first cutting edge and said second cutting edge.

89.-96 (Canceled)

97. (Previously Presented) A cutting tool comprising:

a tool body having a distal end; and

a plurality of tips mounted to the distal end of the tool body, each tip of the plurality

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of tips comprising a plate of substantially quadrilateral shape, the plate having a first corner having a corner angle of less than 90° and a second corner having a corner angle of less than 90° , wherein at least one of the first corner and the second corner is arranged to project along an outer periphery of the distal end of the tool body, wherein:

each tip of the plurality of tips has two opposing cutting edges defined as long cutting edges and another two opposing cutting edges defined as short cutting edges;

one of the long cutting edges in a first of the plurality of tips projecting towards the distal end of the tool body is defined as a first front peripheral cutting edge and one of the short cutting edges in the first of the plurality of tips is defined as a first outer peripheral cutting edge; and

one of the short cutting edges in a second of the plurality of tips projecting towards the distal end of the tool body is defined as a second front peripheral cutting edge and one of the long cutting edges in the second of the plurality of tips is defined as a second outer peripheral cutting edge.

98. (Canceled)

99. (Canceled)